

Patent Claims:

- 1 1. A cellular wheel sluice constructed as a blow through
2 sluice, particularly for dosing secondary fuels, comprising
3 a supply chute (2) and therebelow a horizontally arranged
4 cellular wheel (4) provided with radial cellular webs (3),
5 which comprises blow-in (10) and blow-out holes (11)
6 arranged in the housing below the axis of the cellular
7 wheel within the rotational area of the cellular wheel webs
8 (3) and positioned opposite each other in facing sides of
9 the housing, characterized in that an injection nozzle (15)
10 is integrated in the area of the blow-in hole (10), said
11 injection nozzle blowing transport air into the dosing
12 chambers (5) formed by the cellular wheel webs (3), and in
13 that the cellular wheel webs (3) comprise gap seals (12)
14 hard as metal and positioned in their radial end zones.

- 1 2. The cellular wheel sluice of claim 1, characterized in that
2 the injection nozzle (15) is set-in coaxially and inwardly
3 in a blow-in pipe socket (16) secured to the blow-in hole
4 (10), said injection nozzle causing a reduction of the
5 blow-in cross-section in the area of the blow-in opening
6 (10) relative to the blow-in pipe cross-section.

- 1 3. The cellular wheel sluice of claim 1 or 2, characterized in
2 that the blow-in hole (10) and the blow-out hole (11) are
3 positioned axially opposite each other in the housing
4 facing surfaces (26), and in that the cross-sectional area

at least of the blow-out hole (11) has about the cross-section of the dosing chamber (5).

4. The cellular wheel sluice of one of the preceding claims, characterized in that the injector nozzle (15) is constructed as a pipe shape and comprises a nozzle opening (24) having a diameter corresponding, at the most, to one half of the median dosing chamber diameter.

5. The cellular wheel sluice of one of the preceding claims, characterized in that the gap seals are constructed as separate cutting edges (12) made of a spring steel or other low wear steel alloy and that they are exchangeably secured to the cellular wheel webs (3).

6. The cellular wheel sluice of one of the preceding claims, characterized in that a counter cutting blade (13) is provided in the supply chute (2) parallel to the cutting edges (12) which pass by the counter cutting edge (13) with a small spacing and in an opposing alignment.

7. The cellular wheel sluice of one of the preceding claims, characterized in that the housing section (1) is provided with a wear bushing (21) on the cylinder shaped inner wall and at the facing sides with a wear lining (14) which are made of a spring steel material or of a low wear steel alloy.

1 8. The cellular wheel sluice of one of the preceding claims,
2 characterized in that the cell wheel webs (3) with the
3 cutting edges (12) are secured to the cellular wheel core
4 (9) to extend at a slant to the axial direction or with a
5 slight helix.

1 9. The cellular wheel sluice of one of the preceding claims,
2 characterized in that the counter cutting blade (13) is
3 arranged at a slant to the axial direction of the straight
4 cellular wheel webs (3).